

### Claims

1. A process for the continuous recovery of free tartaric acid from raw materials containing at least 5.0 wt-% potassium hydrogentartrate in dry matter, in particular from byproducts obtained during wine preparation, such as wine yeast, tartar or the like, in that the raw materials are mixed with water and potassium hydrogentartrate is dissolved, **characterized in that** the suspension (solid-liquid mixture) is decanted, the clarified liquid is subjected to a microfiltration, the filtrate is cooled to crystallization temperature under a vacuum, the potassium hydrogentartrate crystals obtained are centrifuged and dissolved in water, the potassium is removed from the aqueous potassium hydrogentartrate solution by ion exchange, and the tartaric acid solution obtained is evaporated by forming tartaric acid crystals.
2. The process as claimed in claim 1, **characterized in that** the filtrate obtained by a microfiltration of aqueous tartar solution is added to the filtrate provided for the cooling crystallization.
3. The process as claimed in any of claims 1 and 2, **characterized in that** the liquid obtained during decanting and/or during the microfiltration and/or during the cooling crystallization is at least partly recirculated to the process, preferably into the suspension consisting of solids and potassium hydrogentartrate dissolved in water.
4. The process as claimed in any of claims 1 to 3, **characterized in that** the cooling crystallization is performed at a temperature of 15 to 5°C and under a vacuum of 0.015 to 0.007 bar.
5. An apparatus for the continuous recovery of free tartaric acid from raw materials containing at least 5.0 wt-% potassium hydrogentartrate in dry matter, in particular from byproducts obtained during wine preparation, such as wine yeast, tartar or the like, in that the raw materials are mixed with water and potassium hydrogentartrate is dissolved, the suspension is decanted, the clarified liquid is subjected to a microfiltration, the filtrate is cooled to crystallization temperature under a vacuum, the potassium hydrogentartrate crystals are centrifuged and dissolved in water, the potassium is removed

from the aqueous potassium hydrogentartrate solution by ion exchange, and the tartaric acid solution obtained is evaporated by forming tartaric acid crystals, **characterized by** a heatable tank (1) with stirrer, which contains the suspension, a decanter (5) with screw or screen discharge, a ceramic microfilter means (12) with a pore size of 0.05 to 0.6  $\mu\text{m}$ , a cooling crystallizer (15) for crystallizing the potassium hydrogentartrate crystals, a centrifuge (19) for spinning off the liquid from the potassium hydrogentartrate crystals, a heatable tank (22) for dissolving the potassium hydrogentartrate crystals, a cation exchanger (27), and an evaporator (30) for removing the water from the tartaric acid solution.